

## CLAIMS

What is claimed is:

1. A method comprising validating a configuration setting of a first application for use with a second application, wherein:

the configuration setting including a first field and a first description of a first condition for the first field;

the second application is composed of computer instructions, the computer instructions having an attribute, the attribute providing a second description of a second condition for a second field; and

the validating includes:

if the first field corresponds to the second field, then comparing the first description of the first condition with the second description of the second condition to determine whether the first condition is met by the second condition; and

if met, then determining that the configuration setting is valid for use with the second application.

2. A method as described in claim 1, wherein the first and second conditions are value constraints selected from the group consisting of:

an integer range;

a float range;

a value set;

a string pattern;

cardinality of a collection;

a mandatory value; and

an optional value.

3. A method as described in claim 1, wherein the first and second conditions are default values.

4. A method as described in claim 1, wherein the first and second conditions are textual descriptions selected from the group consisting of:

a description of units in which the respective first and second fields are expressed;  
a description of meanings of the respective first and second fields; and  
an example of values of the first and second fields.

5. A method as described in claim 1, wherein the attribute:  
is a declarative tag that may be retrieved from and during execution of the second application; and  
does not determine the value of the field.

6. A method as described in claim 1, further comprising communicating a result of the validating to the first application.

7. A method as described in claim 1, wherein the configuration setting further comprises a field type.

8. One or more computer-readable media comprising computer-executable instructions that, when executed, perform the method as recited in claim 1.

9. A method comprising:

reading a first configuration setting of a first application including a first field and a first description of a first condition for the first field;

examining a second application to find a second configuration setting that corresponds to the first configuration setting, wherein the second application is composed of computer instructions, the computer instructions having an attribute, the attribute providing a second description of a second condition for a second field, the second configuration setting having the second field and the second description; and

comparing the second description of the second condition with the first description of the first condition to determine whether the second condition is met by the first condition, and if met then determining that the second configuration setting is valid for use with the first application.

10. A method as described in claim 9, wherein the first and second conditions are value constraints selected from the group consisting of:

an integer range;

a float range;

a value set;

a string pattern;

cardinality of a collection;

a mandatory value; and

an optional value.

11. A method as described in claim 9, wherein the first and second conditions are default values.

12. A method as described in claim 9, wherein the first and second conditions are textual descriptions selected from the group consisting of:

a description of units in which the respective first and second fields are expressed;

a description of meanings of the respective first and second fields; and

an example of values of the first and second fields.

13. One or more computer-readable media comprising computer-executable instructions that, when executed, perform the method as recited in claim 9.

14. A method comprising:

executing a documenter to find a plurality of fields in an application, wherein:

the application is composed of computer instructions;

the computer instructions having attributes; and

each said attribute providing a description of a condition for a respective said field,

forming a configuration file having a plurality of configuration settings of the

application, wherein each said configuration setting includes one said field and the description of the condition for the one said field; and

outputting the configuration file.

15. A method as described in claim 14, wherein the condition is a value constraint selected from the group consisting of:

an integer range;

a float range;

a value set;

a sting pattern;

cardinality of a collection;

a mandatory value; and

an optional value.

16. A method as described in claim 14, wherein the condition is a default value.

17. A method as described in claim 14, wherein the condition is a textual description selected from the group consisting of:

a description of a unit in which the respective said field is expressed;

a description of meanings of the respective said field; and

an example of a value of the respective said field.

18. One or more computer-readable media comprising computer-executable instructions that perform the method as recited in claim 14.

19. A method comprising:  
generating a configuration file having a plurality of configuration settings derived from a first application, wherein:

the application is composed of computer instructions;  
the computer instructions having attributes;  
each said attribute providing a description of a condition for a field; and  
each said configuration setting having one said field and a corresponding said description; and  
validating whether the first application is valid for use with a second said application by comparing each said configuration setting of the first application with a corresponding said configuration setting of the second said application to determine whether each said condition of the first application is met by a corresponding said condition of the second application.

20. A method as described in claim 19, wherein each condition is a value constraint selected from the group consisting of:

an integer range;  
a float range;  
a value set;  
a string pattern;

cardinality of a collection;

a mandatory value; and

an optional value.

21. A method as described in claim 19, wherein each condition is a default value.

22. A method as described in claim 19, wherein each condition is a textual description selected from the group consisting of:

a unit in which a corresponding said field is expressed;

description of a meanings of a corresponding said field; and

an example of a value a corresponding said field.

23. One or more computer-readable media comprising computer-executable instructions that, when executed, perform the method as recited in claim 19.

24. A computer-readable medium comprising computer-executable instructions that, when executed by a computer, direct the computer to:

read a first configuration setting of a first application that includes a first field and a first description of a first condition for the first field; and

validate whether the first condition is met by a second application, wherein:

the second application is composed of computer instructions;

the computer instructions have an attribute that provides a second

description of a second condition for a second field; and

the first condition is validated through comparison with the second condition.

25. A computer-readable medium as described in claim 24, wherein the first and second conditions are value constraints selected from the group consisting of:

an integer range;

a float range;

a value set;

a sting pattern;

cardinality of a collection;

a mandatory value; and

an optional value.

26. A computer-readable medium as described in claim 24, wherein the first and second conditions are default values.

27. A computer-readable medium as described in claim 24, wherein the first and second conditions are textual descriptions selected from the group consisting of:

a description of units in which the first and second fields are expressed;

a description of meanings of the first and second fields; and

an example of values of the first and second fields.

28. A computer comprising:

a processor; and

memory configured to maintain:

a first application composed of computer instructions, the computer instructions having an attribute, the attribute providing a first description of a first condition for a first field;

a configuration file including a configuration setting of a second application having a second field and a second description of a second condition for the second field; and

a configuration module that, when executed on the processor, validates the configuration setting for use with the first application by comparing the second description of the second condition with the first description of the first condition to determine whether the second condition is met by the first condition, and if met, then determining that the configuration setting is valid for use with the first application.

29. A computer as described in claim 28, wherein the second application is stored in the memory.

30. A computer as described in claim 28, wherein the configuration file is received in a transmission from a network for storage in the memory.

31. A computer as described in claim 28, wherein the first and second

conditions are selected from the group consisting of:

- a value constraint;
- a default value;
- a description of units in which the first and second fields are expressed;
- a description of meanings of the first and second fields; and
- an example of values of the first and second fields.

32. A computer comprising:

a processor; and

memory configured to maintain:

a first application composed of computer instructions, the computer instructions having an attribute, the attribute providing a first description of a first condition for a first field, and wherein a first configuration setting includes the first description and the first field;

a configuration file including a second configuration setting of a second application having a second field and a second description of a second condition for the second field; and

a configuration module that, when executed on the processor, validates the first configuration setting for use with the second application by comparing the first description of the first condition with the second description of the second condition to determine whether the first condition is met by the second condition, and if met, then determining that the first configuration setting is valid for use with the second application.

33. A computer as described in claim 32, wherein the second application is stored in the memory.

34. A computer as described in claim 32, wherein the configuration file is received over a network and stored in the memory.

35. A computer as described in claim 32, wherein the first and second conditions are selected from the group consisting of:

a value constraint;

a default value;

a description of units in which the first and second fields are expressed;

a description of meanings of the first and second fields; and

an example of values of the first and second fields.

36. A content server comprising:

a broadcast transmitter;

a processor; and

memory configured to maintain:

a first application that when executed provides content for broadcast by the broadcast transmitter, wherein the application is composed of computer instructions, the computer instructions have attributes, and each said attribute provides a description of a condition for a field; and

a documenter that is executable on the processor to generate a configuration file having a configuration setting of the first application, wherein the configuration setting includes the field and the description of the condition for the field.

37. A content server as described in claim 36, wherein the first and second conditions are value constraints selected from the group consisting of:

- an integer range;
- a float range;
- a value set;
- a sting pattern;
- cardinality of a collection;
- a mandatory value; and
- an optional value.

38. A content server as described in claim 36, wherein the first and second conditions are default values.

39. A content server as described in claim 36, wherein the first and second conditions are textual descriptions selected from the group consisting of:

- a description of units in which the first and second fields are expressed;
- a description of meanings of the first and second fields; and
- an example of values of the first and second fields.

40. A content server comprising:

- a first application composed of computer instructions, the computer instructions having attributes, and each said attribute providing a description of a condition for a field;
- a configuration module that is executable to validate whether each said condition is met by a second application; and
- a documenter that is executable to generate a configuration file having a configuration setting of the first application, wherein the configuration setting includes the field and the description of the condition.

41. A content server as described in claim 40, further comprising a broadcast transmitter, wherein the first application, when executed, provides content for broadcast by the broadcast transmitter.

42. A content server as described in claim 40, wherein each said condition is a value constraint selected from the group consisting of:

- an integer range;
- a float range;
- a value set;
- a string pattern;
- cardinality of a collection;
- a mandatory value; and
- an optional value.

43. A content server as described in claim 40, wherein each said condition is a default value.

44. A content server as described in claim 40, wherein each said condition is a textual description selected from the group consisting of:

- a description of a unit in which a respective said field is expressed;
- a description of a meaning of a respective said field; and
- an example of a values of a respective said field.

45. A system comprising:  
a network;  
a first computer communicatively coupled to the network and including a first application composed of computer instructions, the computer instructions having a first attribute that provides a first description of a first condition for the first field, wherein a first configuration setting includes the first field and the first description;

- a second computer communicatively coupled to the network and including:
  - a second application composed of computer instructions having a second attribute that provides a second description of a second condition for a second field; and

- a configuration module that is executable by the second computer to validate the first configuration setting for use with the second application by comparing the first description of the first condition with the second description

of the second condition.

46. A system as described in claim 45, wherein the first computer is configured as a set-top box and the second computer is configured as a content server.

47. A system as described in claim 45, wherein the first and second conditions are selected from the group consisting of:

a value constraint;

a default value;

a description of units in which the first and second fields are expressed;

a description of meanings of the first and second fields; and

an example of values of the first and second fields.